

REMARKS

The specification has been objected to as the abstract has not been included with the application. Enclosed herewith on the attached sheet is a copy of the abstract which was filed with the original application.

Claims 1 and 3, 4 and 13 have been rejected under 35 U.S.C. §101. As the claims are now amended to include that the strain has been isolated, this should obviate the Examiner's rejection.

Claims 1-13 have been rejected under 35 U.S.C. § 112, first paragraph.

The Examiner's rejection is respectfully traversed. As the applicant's strain TMB5003 has been deposited according to the Budapest Convention, and thus the strain is available under the conditions of the Convention, the rejection should be withdrawn.

Claims 1 & 3-13 have been rejected under U.S.C. §112, second paragraph.

The Examiner's rejection is respectfully traversed.

The Examiner states that the claim is indefinite as it compares to production of lactate and lactate dehydrogenase by the claimed mutant to that of another strain but provides no specific conditions under which comparison could be made. When testing and comparing the two strains, the applicant used conditions which were identical to each other. The conditions had to be identical or the comparison wouldn't be possible and none of the claims in the application would have been able to be included.

The Examiner has stated that claim 4 cites preferred conditions. The claim has now been amended to remove the preferred conditions from the claim and thus the claims should be in proper format. The Examiner has indicated that claims 5-12 are incomplete in absence of a

recovery step. Claim 5 has been amended to obviate the Examiner's rejection.

Claims 11 & 12 were also rejected as including preferred temperature and pH conditions. These claims have been amended to obviate the Examiner's rejection.

Claims 1-13 have been rejected under 35 U.S.C.§102(b) as being anticipated by Sjoberg et al. (1995, AI on 3/30/04 IDS) in light of Picataggio et al. (1997, WO 97/13842; AG on 3/30/04 IDS)

The Examiner's rejections is respectfully traversed.

The Examiner is assuming that the parent strain ATCC19435 is the same as the present TMB5003. The present strain TMV5003 possesses extremely high productivity with regard to lactic acid and lactate dehydrogenase compared to the parent strain. Such results are new and non-obvious. In addition, in the Sjoberg reference, the strain AS211 has a lactate yield improvement of about 20-25%, which is far below the 50% as claimed as the lower limit for the lactic acid production in the present claims. In addition, the WO '842 reference disclosed fermentation of lactobacillus on xylose-containing medium. Lacobacillus is not Lactococcus as they are quite different species, even if they both produce a lactic acid/lactate.

In view of the foregoing, it is believed that the amended claims and the claims dependent therefrom are in proper form. The applicant respectfully contends that the teachings of Sjoberg et al. or the teaching of Picataggio et al. do not anticipate the claimed invention under the provisions of 35 U.S.C.§102(b). Thus, claims 1-16 are considered to be patentably distinguishable over the prior art of record.

The application is now considered to be in condition for allowance and an early indication of same is earnestly solicited.

The applicant does not understand the Examiner's rejection of claims 1-13 as being rejected under U.S.C. §102(b) as being anticipated by Sjoberg in light of Picataggio et al. The applicant believes that under 102 rejection the Examiner may only sight one reference. As neither of these references anticipates the applicant's invention, the applicant believes the rejection should be withdrawn.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Arlene J. Powers', is written over a horizontal line.

Arlene J. Powers
Registration No. 35,985
Gauthier & Connors LLP
225 Franklin Street, Suite 3300
Boston, Massachusetts 02110
Telephone: (617) 426-9180
Extension 110